<u>AMENDMENTS TO THE CLAIMS</u>

1. (Cancelled)

2. (Currently Amended) <u>A computer-readable medium embodying</u> <u>instructions that when executed by a processor would provide a</u> A tool set for simulating a tri-tone attenuated phase-shifting mask including a plurality of structures, a subset of the structures including a transparent region, an opaque region, and an attenuated region, wherein the opaque region and the attenuated region form a rim, the tool set comprising:

means for analyzing optical proximity correction for the subset of the structures; and

means for providing a same rim width in the subset of the structures,

wherein the means for providing includes:

means for dividing a first edge of the attenuated region into a plurality of first segments;

means for dividing a second edge of the opaque region into a plurality of second segments, wherein each second segment corresponds to a certain first segment; and

means for determining whether a second segment moves with its corresponding first segment during optical proximity correction.

3. (Currently Amended) <u>A computer-readable medium embodying</u> <u>instructions that when executed by a processor would provide a</u> A tool set for simulating a tri-tone attenuated phase-shifting mask including a plurality of structures, a subset of the structures including a transparent region, an opaque region, and an attenuated region, wherein the opaque region and the attenuated region form a rim, the tool set comprising:

<div align="center">2</div>

<div align="right">(SN: 10/658,933)</div>

means for analyzing optical proximity correction for the subset of the structures; and

means for providing a same rim width in the subset of the structures,

wherein the means for providing includes:

means for downsizing the attenuated region and then upsizing the attenuated region to generate the same rim width.

4-5. (Cancelled)

6. (Currently Amended) A computer-readable medium embodying instructions that when executed by a processor would provide a A tool set to convert an integrated circuit layout into an attenuated phase-shifting mask layout for fabricating the integrated circuit, the tool set comprising:

means for identifying a subset of structures in the integrated circuit layout;

means for converting the subset of structures into the mask layout, wherein each converted structure includes a transparent region, an opaque region, and an attenuated region, wherein the opaque region and the attenuated region form a rim;

means for analyzing optical proximity correction for a plurality of converted structures; and

means for providing a same rim width for the plurality of converted structures,

wherein the means for providing includes:

means for dividing a first edge of the attenuated region into a plurality of first segments;

means for dividing a second edge of the opaque region into a plurality of second segments, wherein each second segment corresponds to a certain first segment; and

3                                      (SN: 10/658,933)

means for determining whether a second segment moves with its corresponding first segment during optical proximity correction.

7. (Currently Amended) <u>A computer-readable medium embodying instructions that when executed by a processor would provide a</u> ~~A~~ tool set to convert an integrated circuit layout into an attenuated phase-shifting mask layout for fabricating the integrated circuit, the tool set comprising:

means for identifying a subset of structures in the integrated circuit layout;

means for converting the subset of structures into the mask layout, wherein each converted structure includes a transparent region, an opaque region, and an attenuated region, wherein the opaque region and the attenuated region form a rim;

means for analyzing optical proximity correction for a plurality of converted structures; and

means for providing a same rim width for the plurality of converted structures,

wherein the means for providing includes:

means for downsizing the attenuated region and then upsizing the attenuated region to generate the same rim width.

8. (Cancelled)

4 (SN: 10/658,933)